

### **REMARKS**

The Office Action has been reviewed carefully and claims 1, 15 and 28 have been amended in order to place the application in condition for allowance. No new matter has been added. In view of the foregoing amendments and following remarks, Applicant submits that claims 1, 8-10, 15-19 and 28 are in condition for allowance.

#### **The Claimed Invention**

The claimed invention is directed to an aqueous green foliage colorant composition consisting of humic acid, fulvic acid and a water soluble acid blue dye.

#### **35 U.S.C. § 103 Rejection of Claims 1, 4-10, 15-19 and 28**

Claims 1, 4-10, 15-19 and 28 are rejected under 35 U.S.C. § 103(a) as being obvious over Drahos et al. in view of "From Rovral to Chipco, but always Green" (<http://www.bayer-science.co.uk/ChipcoGreenStory.pdf>). (Applicant notes that claims 4-7 have been canceled, and thus should not be included in this rejection). The Examiner asserts that Drahos et al. teach foliage sprays comprising humic or fulvic acids, urea, iron EDTA and water and the Rovral article teaches acid blue 9 colorant added to fungicides.

Claims 1, 15 and 28 have been amended to recite an aqueous green foliage colorant composition consisting of humic acid, fulvic acid and a water soluble acid blue dye.

According to the Supreme Court in *KSR*, it is axiomatic that a claimed invention is not obvious solely because it is composed of elements that are all individually found in the prior art. *KSR Int'l Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007). Motivation must exist to combine the elements with a reasonable expectation of success at the time of the invention.

Drahos et al. teach biosupplements in which humic acid and fulvic acid are but two materials disclosed in a laundry list of materials. The Rovral article teaches that it is necessary to combine two dyes, acid blue 9 and a yellow dye, "which combined to turn the grey liquid Rovral into Rovral green" (page 2, paragraph 2).

The Examiner has stated in a previous Office Action that "when ingredients are well known and combined for their known properties, the combination is obvious absent unexpected results."

Applicant points out that the surprising, unexpected feature of the claimed invention is that when only one dye, i.e., an acid blue dye, is combined with humic acid and fulvic acid, this composition imparts a natural green color to foliage. Humic acid and fulvic acid are not added to

the claimed composition for their known properties as a soil supplement, as taught by Drahos et al. in their laundry list of materials, but rather to enhance the effect of the blue dye to result in an unexpectedly natural green foliage colorant.

Furthermore, Applicant submits that the Rovral article actually teaches away from the claimed invention, as it teaches the necessity to combine acid blue with yellow in order to obtain a green color. Thus, Applicant submits that one skilled in the art would not be motivated to combine the teachings of Drahos et al. with the Rovral article to obtain the unexpected natural green foliage colorant with a reasonable expectation of success, as required by claims 1, 15 and 28. Applicant respectfully submits, therefore, that neither Drahos et al. nor the Rovral article teaches or suggests the surprising green foliage colorant composition of the claimed invention as claimed in claims 1, 15 and 28, in which the combination of humic acid, fulvic acid and an acid blue dye results in a green foliage colorant.

The features of dependent claims 8-10 and 16-19 are not asserted as independently establishing patentability apart from the claim or claims from which they depend, and thus they too are deemed neither to be taught nor suggested by Drahos et al. and the Rovral article, either alone or in combination.

**35 U.S.C. § 103 Rejection of Claims 1, 8-10, 15-19 and 28**

Claims 1, 8-10, 15-19 and 28 are rejected under 35 U.S.C. § 103(a) as being obvious over Drahos et al. in view of Forsyth et al. The Examiner asserts that Forsyth et al. teach the addition of 0.002% Hexacol Acid Blue 9 to fungicide compositions.

Claims 1, 15 and 28 have been amended to recite an aqueous green foliage colorant composition consisting of humic acid, fulvic acid and a water soluble acid blue dye.

Drahos et al.'s disclosure is as described hereinabove. With respect to Forsyth et al., this reference teaches a buffered phosphorus solution in which 19 g of Hexacol Acid Blue 9 is added to 20 liters of water, which then is added to a phosphorus acid solution. The acid blue dye results in the solution having a light-blue color (column 4, line 23), not the surprising and unexpected green color of the claimed composition, when added in combination with humic acid and fulvic acid, as required in claims 1, 15 and 28. Parenthetically, Applicant points out that the concentration of dye that is added by Forsyth et al. would not in practice impart any significant color to foliage. Applicant submits that one skilled in the art would not be motivated to combine the teachings of Drahos et al. and Forsyth et al. to obtain the unexpected natural green foliage

colorant with a reasonable expectation of success, as required by claims 1, 15 and 28. Applicant respectfully submits, therefore, that neither Drahos et al. nor Forsyth et al. teaches or suggests the surprising green foliage colorant composition of the claimed invention as claimed in claims 1, 15 and 28, in which the combination of humic acid, fulvic acid and an acid blue dye results in the green foliage colorant.

The features of dependent claims 8-10 and 16-19 are not asserted as independently establishing patentability apart from the claim or claims from which they depend, and thus they too are deemed neither to be taught nor suggested by Drahos et al. and Forsyth et al., either alone or in combination.

**35 U.S.C. § 103 Rejection of Claims 1, 10, 15-17 and 28**

Claims 1, 10, 15-17 and 28 are rejected under 35 U.S.C. § 103(a) as being obvious over Bessette in view of JP 62148405. The Examiner asserts that Bessette teaches herbicidal compositions comprising water, surface active agents, colorants and iron salts, and 2.5% humic/fulvic acids for application to weeds and grass; and that JP '405 teaches herbicidal compositions comprising colorants such as acid blue 1.

Claims 1, 15 and 28 have been amended to recite an aqueous green foliage colorant composition consisting of humic acid, fulvic acid and a water soluble acid blue dye.

Applicant points out that nowhere in Bessette or JP '405 is there a teaching or a suggestion to combine humic acid and fulvic acid with an acid blue dye to obtain a green foliage colorant. Rather, Bessette teaches a herbicidal composition containing clove oil in which humic acid and fulvic acid can be added to serve as an adjuvant to the herbicide. With respect to JP '405, this reference also discloses a herbicidal composition in which a dye is added, such as acid blue. Such an addition of dye to the herbicidal composition no doubt is added to impart color to its herbicide for safety reasons so as to distinguish the herbicide from water. Applicant submits that one skilled in the art would not be motivated to combine the teachings of Bessette or JP '405 to obtain the unexpected natural green foliage colorant with a reasonable expectation of success, as required by claims 1, 15 and 28. Applicant respectfully submits, therefore, that neither Bessette nor JP '405 teaches or suggests the surprising green foliage colorant composition of the claimed invention as claimed in claims 1, 15 and 28, in which the combination of humic acid, fulvic acid and an acid blue dye results in the green foliage colorant.

The features of dependent claims 10, 16 and 17 are not asserted as independently establishing patentability apart from the claim or claims from which they depend, and thus they too are deemed neither to be taught nor suggested by Besette and JP '405, either alone or in combination.

In view of the foregoing amendments and remarks, it is respectfully submitted that all pending claims 1, 8-10, 15-19 and 28 in the present application are patentable over the cited prior art. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

Respectfully submitted,



Gwen R. Acker Wood, Ph.D.  
Registration No. 51,027  
Attorney for Applicant  
412-566-1295  
gwood@eckertseamans.com